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PATENT & TRADEMARK OFFICE

IN THE CLAIMS:

The claims have been reiterated for the convenience of the Examiner. Please amend the claims as follows:

31. (Reiterated) A method of treating a subject having, or at risk of having, a disorder treatable by producing a therapeutic protein in a mucosal tissue, comprising contacting mucosal tissue cells in the subject transformed with a polynucleotide comprising an expression control element in operable linkage with a nucleic acid encoding the therapeutic protein with a nutrient that induces production of the protein in an amount effective to treat the disorder.
32. (Reiterated) The method of claim 31, wherein the disorder comprises a hyperglycemic condition.
33. (Reiterated) The method of claim 32, wherein the hyperglycemic condition comprises diabetes.
34. (Reiterated) The method of claim 33, wherein the diabetes comprises type I diabetes.
35. (Reiterated) The method of claim 31, wherein the subject has a fasting plasma glucose level greater than 110 mg/dl.
36. (Reiterated) The method of claim 33, wherein the diabetes comprises insulin-dependent diabetes.
37. (Reiterated) The method of claim 31, wherein the disorder comprises obesity or an undesirable body mass.
38. (Amended) The method of claim**[s 1 or]** 31, wherein the nutrient increases expression or secretion of the protein.
39. (Reiterated) The method of claim 38, wherein expression of the protein is increased in non-endocrine cells.
40. (Reiterated) The method of claim 38, wherein secretion of the protein is increased in endocrine cells.
41. (Amended) The method of claim**[s 1 or]** 31, wherein the nutrient comprises a sugar, a fat, a carbohydrate or starch, an amino acid or polypeptide, a triglyceride, a vitamin, a mineral, or cellulose.

42. (Amended) The method of claim**[s 1 or]** 31, wherein the expression control element comprises a nutrient-regulatable element.

43. (Reiterated) The method of claim 42, wherein the nutrient-regulatable element comprises a gut endocrine promoter, a functional variant thereof, or a functional subsequence thereof.

44. (Reiterated) The method of claim 43, wherein the gut endocrine promoter comprises a glucose-dependent insulinotropic polypeptide (GIP) promoter.

45. (Amended) The method of claim**[s 1 or]** 31, wherein the nucleic acid encodes insulin.

46. (Amended) The method of claim**[s 1 or]** 31, wherein the nucleic acid encodes leptin, GLP-1, GLP-2, cholecystokinin, a growth hormone, a clotting factor, or an antibody.

47. (Reiterated) The method of claim 31, wherein the mucosal cell is present in a tissue or organ of the gastrointestinal tract of a subject.

48. (Reiterated) The method of claim 47, wherein the tissue is the intestine.

49. (Reiterated) The method of claim 47, wherein the tissue is the gut.

50. (Reiterated) The method of claim 31, wherein the mucosal cell is an endocrine cell.

51. (Reiterated) The method of claim 50, wherein the endocrine cell is a K-cell.

52. (Reiterated) The method of claim 50, wherein the mucosal cell is a stem cell.

53. (Reiterated) The method of claim 31, wherein the mucosal cell is a non-endocrine cell.

54. (Amended) The method of claim**[s 1 or]** 31, wherein the expression control element in operable linkage with a nucleic acid further comprises a vector.

55. (Reiterated) The method of claim 54, wherein the vector comprises a viral vector.

REMARKS

This amendment is being filed in response to the Office Action mailed December 18, 2002. Claims 1 to 70 are pending. Claims 1 to 32 and 56 to 70 stand withdrawn from consideration as directed to non-elected subject matter. Accordingly, claims 31 to 55 are under consideration.

Regarding the Information Disclosure Statement filed March 23, 2001

Applicants note that an Information Disclosure Statement was filed March 23, 2001. Applicants respectfully request that a copy of Form PTO-1449 filed with the Information